

OASIS Price Estimating Tool Guide



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This ordering guide sets forth the procedures for using the OASIS Price Estimating Tool. This tool will aid you in the labor portion of cost based Independent Government Cost Estimates

https://calc.gsa.gov/estimating_tool/



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January 2022

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1. Introduction

The OASIS' Price Estimating Tool assists in the development of the labor portion of the independent government cost estimate (IGCE) for OASIS SB and OASIS task orders. Its power lies in the ability to index pricing to approximately 640 precise geographic locations. As well, it can be used by OASIS SB and OASIS contractors to develop task order pricing strategies.

Understanding the standardized labor categories in the OASIS contracts is necessary for successful use of the tool. The Estimating Tool captures:

- Every labor occupation in the Office of Management and Budget's (OMB) [Standard Occupational Classification](#) (SOC) System.
- The BLS database of wage statistics for the SOC occupations across the nation and several territories (Guam, Puerto Rico, and Virgin Islands) determined by surveys conducted by the Department of Labor's Bureau of Labor Statistics (BLS).
- Precise performance locations defined as Metropolitan Statistical Areas by the BLS.
- The average indirect costs associated with the OASIS contracts.

****NOTE: The Estimating tool does not reflect OASIS prices; it is a tool to help build estimates and in no way reflects the actual cost structures of the OASIS contract holders.**

2. Background

2.1. Standardized Labor Categories (LCATs)

An important innovation in Government contracting through GSA's OASIS contracts is the standardization of contract labor categories (LCATs) against the OMB's SOC system. The SOC system includes over 800 detailed occupations covering all jobs in the economy. The BLS maintains national, state, and local level wage statistics against the SOC occupations. Standardizing OASIS LCATs to the SOC allowed GSA to leverage the BLS wage information against the broad range of labor markups in the contracts' pricing to develop a powerful labor cost estimating tool. It provides OASIS task order pricing estimates for up to 640 precise geographic locations including:

- The 50 states, the District of Columbia (D.C.), the U. S. Territories of Guam, Puerto Rico, and the Virgin Islands.
- Metropolitan areas within the 50 states, D.C., and the U. S. Territories.
- Non-metropolitan areas within the 50 states, D. C., and the U. S. Territories.

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Metropolitan and non-metropolitan areas are collectively referred to as metropolitan statistical areas (MSAs) in the tool.

2.2 Wage (compensation) Levels

Compensation levels are an important element of successful professional service contracts. FAR Subpart 22.1103 establishes that “all professional employees shall be compensated fairly and properly.” The OASIS contract solicitations included the provision at FAR 52.222-46, Evaluation of Compensation for Professional Employees. This provision establishes that low or unfair compensation levels:

- Are detrimental in obtaining quality professional services needed for adequate contract performance.
- May impair the Contractor’s ability to attract and retain competent professional service employees.

The BLS publishes wage statistics that include wages at the 10th, 25th, 50th (Median), 75th, and 90th percentile of all wages paid in the economy. OASIS contracts are structured to standardize labor categories at four experience and qualification (E&Q) levels: Junior (Jr), Journeyman (Jy), Senior (Sr), and Subject Matter Expert (SME).

SMEs are most commonly priced at the highest wage levels and often above the 90th percentile according to GSA research. For pricing evaluation and strategy GSA developed an Expert wage level for each occupation by applying a statistical standard deviation formula to the BLS’ recorded percentile wages for that occupation. The tool captures all of the BLS’ statistical wage levels and the Expert wage level for all occupations in the SOC.

GSA analyzed the BLS wage statistics to establish an estimate of fair and proper compensation levels that would ensure adequate contract performance and not impair the Contractor’s ability to attract and retain competent professional service employees. That estimate process resulted in a naturally progressing compensation scale:

E&Q Level	E & Q Standard (experience-education)	BLS Wage Percentile
Junior	0-3 years’ – BA/BS degree	50 th
Journeyman	3-10 years’ - BA/BS or MA/MS	75 th
Senior	Over 10 years – MA/MS	90 th
SME	Recognized industry leader	GSA developed Expert wage level

The tool is programmed to capture the related wage levels for each E&Q level of an occupation.

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2.3. Primary versus Ancillary Occupations

The OASIS contracts include 127 professional occupations from the SOC system and these 127 are allocated among 26 specific OASIS LCATs. These occupations are considered those most likely to perform the professional service requirements under OASIS. Each of the 127 occupations is associated with one of the 26 specific LCATs. Refer to OASIS SB and OASIS contracts, Attachments J-1, or on the OASIS website under the [OASIS Labor Category Crosswalk Table](#) to make sure you are familiar with these relationships. Applying the four E&Q levels to each of the 26 LCATs, OASIS/OASIS SB contracts include 104 (26*4) LCATS.

Attachment 1 to the guide discusses several traditional labor categories and where they are associated in the SOC system.

In the tool, each occupation in the SOC is classified as one of two types: Primary, or Ancillary. Primary occupations are those included in the 127 occupations in the OASIS contracts by association with one of the 26 OASIS LCATs. Ancillary occupations are the remaining 700+ occupations in the SOC.

The OASIS contracts allow full flexibility to add all ancillary labor needed to complete a total professional services solution at the task order level. Since ancillary labor categories are not listed at the OASIS contract level, they must be identified at the task order level. The same BLS wage information and OASIS contracts labor markup rates used to estimate primary labor costs can be used to estimate ancillary labor costs. The tool was designed to estimate the cost of both Primary and Ancillary labor.

2.4. Compensation Levels for Ancillary Occupations

In developing the tool, it was necessary to structure a four-level compensation model for Ancillary occupations similar to the Primary occupations for consistency. Because Ancillary occupations cover a broad range of types, from blue-collar to non-professional white-collar, to professional white-collar employees, the four-level compensation structure for Ancillary occupations needed to be flexible and distinct from the structure for Primary occupations. As noted above, some Ancillary occupations are professional white-collar and would likely follow the same compensation levels as the Primary occupations. Other Ancillary occupations like the example of Engineering Technician would follow a lower compensation scale whereas the example of a Secretary would follow an even lower compensation scale.

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To avoid confusion with the Primary occupation E&Q Levels of Jr, Jy, Sr, and SME, the Tool was designed to classify the four wage levels for Ancillary occupations simply as Wage Levels (WL): WL1, WL2, WL3, WL4. To create the needed flexibility in the associated wage scales, the tool allows the user to anchor WL1 for each ancillary occupation at one of the 10th, 25th, or 50th percentiles. This creates three potential naturally progressing compensation levels for Ancillary occupations as illustrated below.

WL1 percentile anchor points/resulting scale				Example of use
WL1	WL2	WL3	WL4	
10 th Percentile	25 th Percentile	50 th Percentile	75 th Percentile	LOW
25 th Percentile	50 th Percentile	75 th Percentile	90 th Percentile	MEDIUM
50 th Percentile	75 th Percentile	90 th Percentile	One Std Deviation above 90 th	HIGH

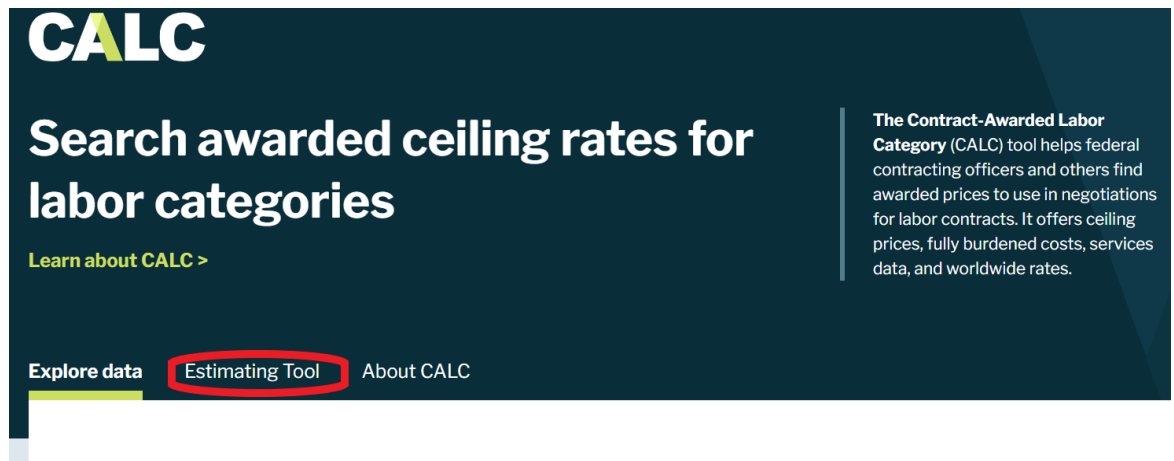
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3. Using the Tool

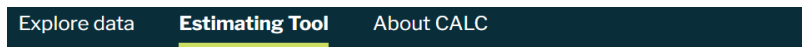
3.1. Access the tool in one of the following:

- From the [OASIS webpage under Research Tools](#)
- Navigate directly to the tool using the following link: https://calc.gsa.gov/estimating_tool/

Once on website, click Estimating Tool



Scroll to Bottom, click “Get Started”

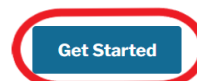


Pricing Control Information

The Price Estimating Tool (PET) assists Federal agencies in developing the labor portion of the independent government cost estimate (IGCE) for OASIS and other task orders.

Users can conduct wage comparisons across different occupations, experience and qualifications levels, indirect rate levels, and metropolitan statistical areas. The tool provides users the ability to select pricing in specific geographic locations.

Results can be exported in Excel format and include Base plus option pricing. Users are encouraged to use the user guide when using the tool. Note, if OASIS is selected as the contract vehicle, understanding the standardized labor categories in the OASIS contracts is necessary to successful use of the tool.



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3.1. Pricing Index Tool Page for OASIS Labor Categories

Step 1. Title: This is the name

Title*

Enter a title that describes your IGCE. You may enter up to 255 characters.

Step 2. Task Order Id: This is your solicitation or project number.

Id Number*

Enter a reference number associated to your task/delivery order, e.g. acquisition number, solicitation number. You may enter up to 50 characters.

Step 3. Requester Name: Enter Your Name.

IGCE Requester Name*

Please enter your name. This will be displayed on the IGCE. You may enter up to 150 characters.

Step 4. Contract Family: This is a pull-down menu. Select OASIS or OASIS SB.

Contract Family*

Select the IDIQ contract you will utilize for this acquisition.

Step 5. Contract Year: This is a pull-down menu. This selects the year for your base period of performance. If doing your solicitation in FY18, select "5".

Contract Year*

Select the contract year in which your task/delivery order will be awarded. E.g. The base year is FY2021; contract year 2 is FY2022. If you will award your task order in FY2022, select 2.

FY2014-2015	Year 1 (BASE)
FY2015-2016	Year 2
FY2016-2017	Year 3
FY2017-2018	Year 4
FY2018-2019	Year 5
FY2019-2020	Year 6
FY2020-2021	Year 7

Step 6. Comments: Optional; If you are doing multiple estimates for the same requirement, you can annotate that here.

Comments

Enter comments related to your IGCE. Comments will appear on the IGCE export. You may enter up to 2000 characters.

Step 7. Launch Tool: Once the information is input, click "Launch Pricing Index Tool".

Launch Price Index Tool

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3.3. Pricing Index Tool Page for OASIS Labor Categories

Price Estimating Tool

Occupation*

Select One Occupation

LCAT Title

E & Q Level*

Indirect Rate Level*

Choose one...

State*

Choose state

MSA*

County (Optional)

Choose county

Wage Scale Options

	Junior	Journeyman	Senior	Expert
<input type="radio"/> LowestScale				
<input type="radio"/> Medium Scale				
<input type="radio"/> Highest Scale				

Estimated Numbers of Hours

Base Year*

Order Year 2*

Order Year 3*

Order Year 4*

Order Year 5*

Comments

Click to populate the table below with the estimated wage data for your selections above.
As needed, alter your selections in the above fields and click Generate Wages again to populate the table with additional entries.

Run

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Step 1. Occupation: This is a drop down menu. Select the occupation you wish to estimate. If the selected occupation is included in the OASIS standardized labor categories, the name of the labor category will appear. Otherwise, the word “Ancillary” will appear. [OASIS Labor Category Crosswalk Table](#)

Occupation*

Select One Occupation

Select the occupation (SOC code) that reflects work that is expected to be performed on your task/delivery order.

LCAT Title

Step 2. E&Q Level: This is a drop down menu. For OASIS standardized labor categories, select Junior, Journeyman, Senior, or SME. For ancillary occupations, select WL1, WL2, WL3, or WL4.

E & Q Level*

Choose one...

Select the experience and qualifications (E&Q) level reflecting work that is expected for the occupation selected above.

In order to better understand how the Estimating Tool works and what the generated rates are based upon, please refer to the background information in Sections 2 and 4 for details surrounding Bureau of Labor Statistics wage compensation levels and their use in estimating OASIS standardized labor categories and ancillary labor categories. For quick reference, the OASIS standardized labor categories follow the compensation level mapping below:

E&Q Level	E & Q Standard (experience-education)	BLS Wage Percentile
Junior	0-3 years' – BA/BS degree	50 th
Journeyman	3-10 years' - BA/BS or MA/MS	75 th
Senior	Over 10 years – MA/MS	90 th
SME	Recognized industry leader	1 Std Deviation above 90th

When you select an occupation that is Ancillary, the “LCAT Title” field auto-fills with “Ancillary.” You will then select WL1-WL4 for the most appropriate E&Q Level.

WL1 percentile anchor points/resulting scale				Example of use
WL1	WL2	WL3	WL4	
10 th Percentile	25 th Percentile	50 th Percentile	75 th Percentile	LOW
25 th Percentile	50 th Percentile	75 th Percentile	90 th Percentile	MEDIUM
50 th Percentile	75 th Percentile	90 th Percentile	One Std Deviation above 90 th	HIGH

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Step 3. Indirect Rate Level:

Indirect Rate Level*

Choose one...

Select the indirect rate level from the options that reflect a low, average and high markup for the selected occupation and E&Q level.

NOTE: The assignment of E&Q Level to BLS Wage Percentile for OASIS Labor Categories was done for the establishment of OASIS Not-To-Exceed (ceiling) prices for sole-source task orders. Accordingly, this will likely result in an upper range estimate for your requirement, depending on the specific details associated with your task order. For estimating purposes, you may elect to price labor categories one level below what you are actually contracting for.

Step 4. State:

State*

Choose one state

Select a state from the list where you expect work will be performed, or similar to where work will be performed. The state list reflects all states where wage data exists for your selected occupation.

Step 5. MSA:

MSA*

Choose one area

Select a Metropolitan Statistical Area (MSA), where you expect work will be performed, or similar to where work will be performed. The MSA list is limited to areas where wage data exists for your selected occupation.

County (Optional)

Choose County

Step 6. Wage Scale Options: This section will give you the opportunity to select low, medium or high based on your own estimation and understanding of the labor category you are selecting.

Note: In many instances a labor category title does not fully capture the complexity of the required task that is expected to be completed by the resulting labor category description. In the example of the instructor that we are looking at with this IGCE generation one could consider the full range of what duties an instructor could be expected to do. If the labor category description were for a simple classroom delivery you might expect to pay less than you would for an Instructor that co-habitates with a deployed team and does hands on training of complex concepts.

Wage Scale Options

Junior

Journeyman

Senior

Expert

☐ LowestScale

☐ Medium Scale

☐ Highest Scale

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Step 7. Base Year/Order Years:

Estimated Numbers of Hours

Base Year*

Enter the total number of hours expected to be performed during the task order base year for the occupation/E&Q level selected above.

Order Year 2*

Enter the total number of hours expected to be performed during the task order base year for the occupation/E&Q level selected above.

Order Year 3*

Order Year 4*

Order Year 5*

Step 8. Generate your IGCE. This step produces a completed detailed estimate for your task order file. Press the blue Run button.

Click to populate the table below with the estimated wage data for your selections above.

As needed, alter your selections in the above fields and click Generate Wages again to populate the table with additional entries.

Run

3.4. Pricing Index Tool Page for OASIS Labor Categories

If you have option years in your IGCE they will show in a table similar to the one shown below.

Pricing Information							
IGCE Summary				SAMPLE INFORMATION			
Occupation(SOC Code)	E&Q Level	MSA, State	County (optional)	Wage Scale	Indirect Rate Level	Total T&M LCAT Estimate	Comments
Accountants and auditors(132011)	JR	Atlanta-Sandy Springs-Roswell, GA	N/A	Low	Low	876.42	
IGCE Details - Task Order Base Year							
Occupation(SOC Code)	E&Q Level - LCAT Title	MSA, State	County (optional)	Estimated Hours	Estimated Hourly Rate	Total T&M LCAT Estimate	
Accountants and auditors(132011)	JR	Atlanta-Sandy Springs-Roswell, GA	N/A	4	69.87	279.50	
IGCE Details - Task Order Year 2							
Occupation(SOC Code)	E&Q Level - LCAT Title	MSA, State	County (optional)	Estimated Hours	Estimated Hourly Rate	Total T&M LCAT Estimate	

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The completed estimate contains two sections: the Control Information and the detailed line items (including a summary line). If you wish to modify the estimate with additions or deletions, press the “Launch the Price Indexing Tool” button and repeat the previous steps. If you are otherwise satisfied with the estimate, move to the final step to generate a PDF or Excel copy of your estimate.

Step 3. Generate Excel format copy of your IGCE. You may select to have your IGCE generated as an Excel file.

IGCE Details - Task Order Year 5

Occupation(SOC Code)	E&Q Level - LCAT Title	MSA, State	County (optional)	Estimate Hours
Accountants and auditors(132011)	JR	Atlanta-Sandy Springs-Roswell, GA	N/A	2

Generate IGCE Excel

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4.1 Preparatory work before using

Some preparation is necessary before using the OASIS Estimating Tool to compile your IGCE. You must be familiar with the OMB SOC system and know how to find and analyze the functional statements for each occupation. Two websites sponsored by the DOL will be useful in this regard:

http://www.bls.gov/oes/current/oes_nat.htm

This is the Occupational Employment Statistics website. You can navigate the links on this webpage to review occupations and related functional statements.

<http://www.onetonline.org/>

This website is available to the public and is designed to support multiple uses. Job seekers can find employment related information. Workforce and HR specialists can find job classification related information. Researchers can find occupational and industry employment profiles. The value you will find is in the ability to search by a job title, job function description or other terms and find matches ranked in order by the relevance of the occupational title, alternate titles, description, tasks, and detailed workactivities associated with the keyword(s) you enter.

For each occupation, the O*NET website lists:

- The job function description.
- Alternate job titles reported for the occupation.
- The tasks performed by a person in the occupation.
- The tools and technology used in the occupation.
- The knowledge, skills and abilities required by the occupation.
- Work activities related to the occupation.
- Work context considerations for the occupation.
- Education and experience requirements.
- Work styles and values related to the occupation.

Once you are familiar with the SOC system, occupations in the system, and website resources, you need to be familiar with which occupations are included in the OASIS LCATs and with which LCAT each of those occupations are associated. Refer to Attachment J-1 in the contracts. You will find that the OASIS family LCATs consist of: 8 individual SOC occupations that are aligned in 1:1 relationships with OASIS LCATs of the same title, and 119 SOC occupations that are aligned in many:1 relationships with OASIS LCATs with group names. Each of the 119 SOC occupations are aligned with a subgroup under one of the group names. E.G. All engineers are grouped in the Engineer Group. Each individual Engineer type (e.g. Nuclear Engineer) is assigned to a subgroup under the Engineer Group. Review Attachment 2 to the guide for an explanation of the four major groups and their subgroupings.

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Now you will need to analyze the proposed task order statement of work and determine which occupations are most appropriate to perform that work. The O*NET web site will be most useful in this regard. You can compare occupational functional descriptions, occupational tasks, tools and technology needed, knowledge, skills, abilities, work activities and context, education and experience requirements, and work styles with the requirements and expectations of the task order statement of work.

Your preparatory research should provide:

- A list of occupations and skill (E&Q) levels necessary to perform the complete statement of work;
- Specific local market data that may affect the direct professional employee compensation and consequent hourly direct wage rates;
- An estimate of the number of hours required by each occupation skill level to complete the work; and
- A determination of the productive man-year factor you will use, e.g. 2,000, 1,920 or other hours.

It is also helpful to make notes where task order years require differing productive man-year levels. Some examples of this situation:

- The task order requirements are met by having one junior and senior accountant in the task order base year, but then one junior and two senior accountants in the remaining task order years.
- A Financial Examiner is needed only in the final task order year and only for an estimated 900 hours.
- A Chemical Engineer is needed in every task order year, but only for an estimated 800 hours per year.

You will also need to determine the location of task order performance for each occupation. The OASIS Estimating Tool supports requirements with multiple performance locations.

It will be helpful to do some local economic research to determine if there may be some anomalies in pay comparability. For example, if most of the occupations needed for the task order work are in adequate supply in your local economy, this might suggest that your target estimate for that occupation can safely be focused on the lower or middle range of professional wages and associated labor rates due to adequate competition for available jobs. However, if one or more occupations needed for the task order work are in short supply in the local economy, you may want to target the estimate for that/those occupation(s) in the higher end of wages and labor rates. Competition for those occupations may not be adequate leaving the job seekers in the advantageous position to demand higher than usual pay.

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Attachment 1 – Traditional Job Titles and Labor Categories

There are many traditional industry job titles used as labor categories in current Government contracts. GSA has compiled a list from the DOL websites cross referencing over 1,000 traditional job titles reported to the BLS with the 127 SOC occupations under which they were reported and the OASIS LCATs to which they are linked. The list can be reviewed online [OASIS Labor Category Crosswalk Table](#).

There are several traditional labor categories found in Government contracts that are not readily associated with SOC occupations. Among them is the traditional job title/labor category of Project Manager. The BLS does not classify project managers as an occupation. When they work in the areas of construction or information technology, the BLS classifies them as construction managers or computer and information systems managers. When they work in other areas, the BLS classifies them in a residual category of unclassified managers¹ – You will find project managers on the cross-reference list linked to SOC code 11-9199. Managers, All other.

Another traditional title, Program Manager, may be aligned with a number of occupations depending on the area in which the program manager works. Some examples of where it might align, depending on the functions performed, include: 11-9151, Social and Community Service Managers; 11-9111, Medical and Health Services Managers; 11-1021, General and Operations Managers; 11-9041, Architectural and Engineering Managers; 17-2081, Water/Wastewater Engineers; 11-9121, Water Resource Specialists; 13-1111, Management Analysts; and 11-9199, Managers, All other. Other alignments may be appropriate based on actual functions performed. The key to finding the best fit for your program manager needs is a careful examination and comparison of your SOW requirements with SOC occupation functional statements. You will not find the job title Contract Specialist as a SOC occupation title. For contract specialist work, you might find the best fit in occupation code 13-1023, Purchasing Agent, except Wholesale, Retail, and Farm Products.

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Attachment 2 – OASIS LCAT Groupings and Sub-groups

A GSA objective in awarding the OASIS contracts was to reduce the number of OASIS LCATs to a manageable number for award and administration purposes. To reach this objective, GSA grouped 119 of the 127 professional SOC Occupations to be included in the OASIS contracts into four groups: Managers, Business and Financial Operations Specialists, Engineers, and Scientists and Science Technicians. These OASIS groups link to the SOC system major groups: 11-0000 Management Occupations, 13-0000 Business and Financial Operations Occupations, 17-0000 Architecture and Engineering Occupations, and 19-0000 Life, Physical, and Social Science Occupations, respectively. Sub-groups within each group were established based on relationships between the compensation levels of the individual occupations within the group. The mean, or average, hourly wage and standard deviation were calculated for the combined individual hourly wages within the group. Individual occupations with an hourly wage within the same standard deviation range were then aligned into the same subgroup.

Consequently, all individual occupations fell into one of the following sub-groups:

- Occupations with hourly wages within one standard deviation of the Mean
- Occupations with hourly wages between one and two standard deviations
- Occupations with hourly wages between two and three standard deviations

Groupings occurred both above and below the standard deviation. The Engineering Group is shown in the table below as an example of the structure. The illustration following the table will show that Engineer sub-groups aligned as follow:

Standard Deviation Range	Hourly Wage Ranges	Sub-Group
+3 Standard Deviations	\$139.19 to \$160.67	Engineer Group 1
+2 Standard Deviations	\$117.70 to \$139.18	Engineer Group 2
+1 Standard Deviation	\$96.21 to \$117.69	Engineer Group 3
-1 Standard Deviation	\$74.72 to \$96.20	Engineer Group 4
-2 Standard Deviations	\$53.23 to \$74.71	Engineer Group 5

All individual engineering occupations were listed in order from highest to lowest hourly wage, using SME or expert level wage data. Then each with hourly wages falling into a given wage range were aligned with the associated sub-group.

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2012 ENGINEER GROUP SOCs AND OASIS WAGES BY E&Q LEVELS					
		HIGHEST PAID STATE DATA Level 4			
Occ Code	Occupation title	SME			
17-2171	Petroleum Engineers	160.50	ENGR GR 1		
17-2041	Chemical Engineers	123.71	ENGR GR 2		
17-2151	Mining and Geological Engineers, Including Mining Safety Engineers	111.00	ENGR GR 3		
17-2081	Environmental Engineers	105.65			
17-2031	Biomedical Engineers	104.11		+3 Std Dev	\$160.68
17-2011	Aerospace Engineers	102.60		+2 Std Dev	\$139.19
17-2112	Industrial Engineers	101.42		+1 Std Dev	\$117.70
17-2161	Nuclear Engineers	99.57		Mean	\$96.21
17-2121	Marine Engineers and Naval Architects	92.94	ENGR GR 4	-1 Std Dev	\$74.72
17-2199	Engineers, All Other	92.60		-2 Std Dev	\$53.23
17-2072	Electronics Engineers, Except Computer	91.91			
17-2141	Mechanical Engineers	91.83			
17-2131	Materials Engineers	91.18			
17-2071	Electrical Engineers	89.67			
17-2111	Health and Safety Engineers, Except Mini	84.76			
17-2051	Civil Engineers	82.06			
17-1021	Cartographers and Photogrammetrists	70.38	ENGR GR 5		
17-2021	Agricultural Engineers	69.71			
17-1022	Surveyors	62.38			
	Standard Deviation of the Group	21.49			
	Mean Hourly Wage of the Group	96.21			